

Amendments to the Specification:

Please replace the paragraph starting with "Unlike the configuration" beginning on page 2, lines 9-16 with the following amended paragraph:

1
Unlike the configuration of the optical one plus one protection switching, the configuration of the optical one-to-one protection switching requires communications of control signals between nodes. The optical one-to-one protection switching configuration is characterized by the inclusion of extra traffic. However, because the optical switch changes the corresponding transmission lines in the configuration, the following problem (A) arises. Problem (A): If any extra traffic is included in a transmission line, when the switching block uses only optical switches as shown in Fig. 13Fig. 12A, the configuration might experience a miss-connection between client terminals in the switching process.

2
Please replace the paragraph starting with "Fig. 13" beginning on page 2, lines 17-14 with the following amended paragraph:

2
Fig. 13Fig. 12B shows a miss-connection between client terminals in the switching process after a switching request is issued. In Fig. 13Fig. 12B, the miss-connection occurs during a switching operation when a fault is detected in the first transmission line 180 in the down-stream communications. Still also referring to Fig. 12Fig. 12 A, in the normal state, the transmitter 200a of the client terminal 200 and the receiver 210b of the client terminal 210 are connected to each other through the first down-stream transmission line 180. The transmitter 205a of the client terminal 205 and the receiver 215b of the client terminal 215 are connected to each other through the down-stream second transmission line 190.

E Please replace the paragraph starting with "Fig. 2" beginning on page 6, lines 11-18 with the following amended paragraph:

A³ Fig.2 shows a flow chart illustrating steps involved in a switching sequence for preventing a miss-connection during a transmission line switch according to the current invention. In this case, a description is provided for a switching procedure in shutting off a gate when a fault occurs in the first transmission line 180 during down-stream communications. However, the switching is also performed in another transmission line, such as the up-stream transmission line, the second transmission line, or the like during a switching operation required due to maintenance, etc. other than a fault. The process is described with respect to steps performed by components as shown in Fig. 1.

E Please replace the paragraph starting with "At first" beginning on page 6, lines 25-26 and ending on page 7, lines 1-3 with the following amended paragraph:

A⁴ At first, signals are exchanged between the transmit node 220 and the receive node 225. The receive node 225 monitors the performance of the first transmission line or down-stream 180 through a performance monitor 232 and 233 in Act 274. At this time, if a fault is detected in the first transmission line 180 in Act 276, a miss-connection preventive processing is executed in Act 278. In the above described processing, the controller 235 controls the drive circuit 245 in the node 225 so as to open the optical gates 265b to block the transmission of optical signals to the receiver 2156215b. Then, a switching request controller or unit 237 and 238 of the receive node 225 transmits a switching request 282 to the transmit node 220 in Act 280. The switching request 282 transmitted to the transmit node 220 from the receive node 225 is transmitted through the first transmission line or up-stream 185 or the second transmission line or up-stream 195.

E Please replace the paragraph starting with "A switching request" beginning on page 7, lines 16-25 and ending on page 8, lines 1-2 with the following amended paragraph:

A⁵ A switching request controller of the transmit node 220 sends a switching request 292 to the receive node 225 in Act 290. The switching request 292 is sent from the

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cont.*

transmit node 220 to the receive node 225 via the second transmission line or down-stream 190. When the receive node 225 receives the switching request 292 in Act 294, the switching setting of the optical switch 255 is changed in Act 296. Thereby, the receiver 210b of the client terminal 210 is connected to the second transmission line 190. At this time, the transmitter 210a in the client terminal 210 is connected to the second transmission line 195 ~~in the client terminal 210~~, and the receiver 215b is shut off by the gate 265b in the client terminal 215. Thereby, the transmitter 215a is connected to the first transmission line (up-stream) 185. In the node 225, a performance monitor 23 monitors the performance of the second transmission line (down-stream) 190 in Act 298. The gates 260b and 265a are also simultaneously as the gates 260a and 265b open in the miss connection preventive processings in Acts 278 and 286. When the gates 260b and 265a are subsequently open after the gates 260a and 265b, the above described process is repeated for transmitters and receivers associated with the transmission lines 185 and 195.